BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

Name of Work: Improvements to Roads and Drains in Hosabalunagara and Singapura Garden in Ward No. 11 Kuvempunagara.

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
							Estimate Cost Rs.		1000000.00
1	KSRRB 300-1. Earth work excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications complete as per specifications MORTH chapter 3. **Page No. 149/ Item No. 19.1/ PWD SR 2011-12**	Cum							
	Removal of Silt in Drain		2	130.00	0.60	0.30	46.80		
			2	105.00	0.60	0.30	37.80		
			2	50.00	0.60	0.30	18.00		
	Berm Cutting		1	130.00	4.80	0.15	93.60		
			1	105.00	4.80	0.15	75.60		
			1	50.00	4.80	0.15	36.00		
							307.80	**62.86**	**19347.00**
	Basic Rate	58.20							
	Area Weightage @8%	4.66							
	Total	**62.86**							
2	KSRRB 300-2 : Earth work excavation by manual means in Hard soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications complete as per specifications MORTH chapter 3 **Page No. 149 / Item No. 19.2/ PWD SR 2011-12**	Cum							
	For Culverts		4	5.50	2.00	1.10	48.40		
	For Slab Drains		2	70.00	0.60	0.60	50.40		
			2	50.00	0.60	0.60	36.00		
							134.80	**87.05**	**11734.00**
	Basic Rate	80.60							
	Area Weightage @8%	6.45							
	Total	**87.05**							
3	Removing B.S. Slab Drain and stacking (P.28/I.5.32 PWD SR - 2011-12)	Sqm							
			1	60.00		1.35	81.00		
			1	30.00		1.35	40.50		
			1	45.00		1.35	60.75		
							182.25	47.52	**8661.00**
	Basic Rate	44.00							
	Area Weightage @8%	3.52							
	Total	**47.52**							
4	Refixing stone slabs of drains and pointing in CM (1:3) (P.28/I.5.33 PWD SR - 2011-12)	Sqm							
			Vide Item No.3				**182.25**	60.18	**10967.00**
	Basic Rate	55.72							
	Area Weightage @8%	4.46							
	Total	**60.18**							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
5	Providing **7.5 cms thick** granite slabs of selected quality roughly dressed and fixed in cement mortar (1:6) including fixing curing etc., complete (P.28/I.5.31.1 PWD SR - 2011-12)	Sqm							
			2	70.00		1.65	231.00		
			2	50.00		1.65	165.00		
							396.00	332.37	**131619.00**
	Basic Rate	307.75							
	Area Weightage @8%	24.62							
	Total	**332.37**							
6	KSRRB M300-53. Construction of embankment with approved materials Gravel/Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300-2 complete as per specifications. which includes cost of gravel / Murrum, watering charges & compaction by vibratory roller) **PWD SR 2011-2012 Bangalore circle Pg No. 156, I No. 19.60**	Cum							
			1	130.00	4.50	0.15	87.75		
			1	105.00	4.50	0.15	70.88		
			1	50.00	4.50	0.15	33.75		
							192.38	146.88	**28256.00**
	Basic Rate	136.00							
	Area Weightage @8%	10.88							
	Total	**146.88**							
7	KSRB 4-1.3 : Providing and laying in position **plain cement concrete of mix M7.5 with OPC cement @ 180 Kgs** using 40mm and down size graded granite metal, corse aggregates @ 0.85 cum and fine aggregtes @ 0.58cum machine mixed, concrete laid in layers not exceeding 15 cms thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2 (P.12/I.4.3 PWD SR - 2011-12)	Cum							
	For Culvert		4	5.50	1.80	0.15	5.94		
							5.94	3939.41	**23400.00**
	Basic Rate	3647.60							
	Area Weightage @ 8%	291.81							
	Total	**3939.41**							
8	KSRB 5.2-3 : Providing and constructing granite / trap / basalt size stone masonry in foundation **cement mortar 1:6**, stone hammered dressed in courses not less than 20 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specification. KBS 5.1.13 (P.25/I.5.6 PWD SR -	Cum							
			2x4	5.50	0.60	0.60	15.84		
							15.84	2827.87	**44793.00**
	Basic Rate	2618.40							
	Area Weightage @ 8%	209.47							
	Total	**2827.87**							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
9	KSRB 4-1.6 : Providing and laying in position plain cement concrete of **mix M15 with cement @ 240 kgs with 20mm** and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregates @ 0.459 cum, machine mixed, concrete laid in layers not exceeding 15cms, thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications, specification. No. KBS 4.1,4.2. **No. 12/ Item No. 4.6/ PWD SR 2011-12**	Cum							
			2x4	5.50	0.60	0.10	**2.64**	4462.34	**11781.00**
	Basic Rate	4131.80							
	Area Weightage @ 8%	330.54							
	Total	**4462.34**							
10	KSRB 15.1.1 Providing flush pointing to square rubble, course or uncoursed stone masonry with **cement mortar 1:3,** 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications. (P.119 / I.15.1 PWD SR - 2011-12)	Sqm							
			2x4	5.50		0.60	26.40		
							26.40	75.84	**2002.00**
	Basic Rate	70.22							
	Area Weightage @ 8%	5.62							
	Total	**75.84**							
11	KSRB 4-6.4: Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for vertical surface such as walls at any thickness, including attached pilasters, buttresses, plinth and string courses cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.2 (P.17 / I.4.31 PWD **For Culvert**	Sqm							
			4x9	4.85	0.23		40.16		
			4x9	0.60	1.80		38.88		
							79.04	221.40	**17499.00**
	Basic Rate	205.00							
	Area Weightage @ 8%	16.40							
	Total	**221.40**							

Sl	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
12	KSRB 4.2.2 : Providing and laying in position **reinforced cement concrete of design mix M20 with OPC cement @ 320 Kgs with 20mm** and down size graded granite metal coarse aggregates @ 0.878cum and fine aggregates @ 0.459 cum wuth superplastisier @ 3lts confirming to IS 9103-1999 reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in foundation plinth and ground floor level for roof slabs, staircase, lintels, retaining walls, return walls, wall (any thickness) including attached plasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window cills, fillets etc., including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.6 **(P.13/I.4.11 PWD SR - 2011-12)**	Cum							47353.0
	For Culverts		4x9	0.60	1.80	0.23	8.94		
							8.94	5296.75	**47366.00**
	Basic Rate	4904.40							
	Area Weightage @ 8%	392.35							
	Total	**5296.75**							
13	KSRB 4.9.2:providing T.M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost pf materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3 **Page No. 19/ Item No. 4.46/ PWD SR 2011-12**	Qtl							55843.0
	85 Kgs / Cum		0.85	8.94			**7.60**	7347.82	**55851.00**
	Basic Rate	6803.54							
	Area Weightage @ 8%	544.28							
	Total	**7347.82**							
14	Providing, laying, spreading and compacting graded stone aggregate to **wet mix macadam** specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver in sub-base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications **(P.166/I.20.18) PWD SR - 2011-12.**	Cum							
			1	130.00	4.50	0.15	87.75		
			1	105.00	4.50	0.15	70.88		204030.53
			1	50.00	4.50	0.15	33.75		
							192.38	1060.56	**204025.00**
	Basic Rate	982.00							
	Area Weightage @ 8%	78.56							
	Total	**1060.56**							

Sl	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
15	KSRRB 500-1.1 : Cleaning the existing WBM road surface including removing of binding materials and other foreign matter with wire bushes and small picks, sweeping with brooms or soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries, curing complete as per specifications. Specification No. 500-1.3 **(P.171/I.21.1) PWDSR 2011-12**	Sqm							
			1	130.00	4.50		585.00		
			1	105.00	4.50		472.50		
			1	50.00	4.50		225.00		
							1282.50	10.04	**12881.00**
	Basic Rate	9.30							
	Area Weightage @ 8%	0.74							
	Total	**10.04**							
16	KSRRB M500-6: Providing and applying primer coat with bitumen emulsion on prepared surface of granular base including clearing of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications. MORTH specification NO. 502, **Page No. 171/ Item No. 21.6/ PWD SR 20011-12 Revised Rate**	Sqm							
			1	130.00	4.50		585.00		
			1	105.00	4.50		472.50		
			1	50.00	4.50		225.00		
							1282.50	40.59	**52052.00**
	Basic Rate	37.58							
	Area Weightage @ 8%	3.01							
	Total	**40.59**							
17	KSRRB M500-18: Providing and laying **semi dense bituminous concrete** 25mm thick with 100-120 TPH batch type HMP producing an average output of 75 tonnes per hour using crushed aggregates of specified grading, premixed with bituminous binder at 4.5 to 5% of mix and filler, transporting the hot mix to work site, laying with a hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem roller to achieve the desired compaction as per MORTH specifications clause No. 500.8 complete in all respects as per specifications. **With 80/100 grade bitumen, No. 151/ Item No. 21.20.1/ PWD SR 2011-12 Revised Rate**	Cum							
			1	130.00	4.50	0.025	14.63		
			1	105.00	4.50	0.025	11.81		
			1	50.00	4.50	0.025	5.63		
							32.06	8882.32	**284789.00**
	Basic Rate	8224.37							
	Area Weightage @ 8%	657.95							
	Total	**8882.32**							

Sl	Description of item	Unit	No				Qty	Rate	Amount
	Lead for Disposal of Debris shall be payable at carriage rates by Mechanical means inlcuding loading and unloading. From 0.00 to 2.00 Km (Page No.123) Basic rate for haulage of materials as per item no.17.4 page 141) Rs. 2.00	Cum					307.80 + 134.80 Vide Item No. 1+2	375.92 / 72.71	27331.00
	AW of earth 1.28 tonne/kg for 2X1.28X2.00=5.12	5.12					442.60		32179.00
	Add loading and unloading Vide item no.17.1 P.no.141	62.20							
		67.32							
	Area Weightage @ 8%	5.39							84593.20
	Total	**72.71**							798.00
19	Miscellaneous and unforeseen charges	LS							707.00
								Total	**1000000.00**

(Rupees Ten Lakhs Only)

CERTIFICATE :

1 The work spot has been inspected and the work is found necessary.
2 This estimate is prepared as per P.W.D S.R of 2011-12.
3 The provisions were made in this estimate are necessary and adequate.
4 This works come under B.B.M.P. limits.

Assistant Engineer

Assistant Executive Engineer
Bruhat Bangalore Mahanagara Palike
Vidyaranyapura Sub Division

Executive Engineer
Bruhat Bangalore Mahanagara Palike
Byatarayanapura Division

ADMINISTRATIVELY SANCTIONED FOR Rs..... 10 Lakhs

Rupees Ten Lakhs

Under 2275 P1878- RB per-works

Registered as EE ( ) No 9.....9.....
Subject to conditions contained in enclosed memo EE ( ) No /9/....
Dt 11.7.2012 Estimate A/Sanctioned
Je(Ka) RR/375 No
dated 11.7.2012 Rs 10 Lakhs

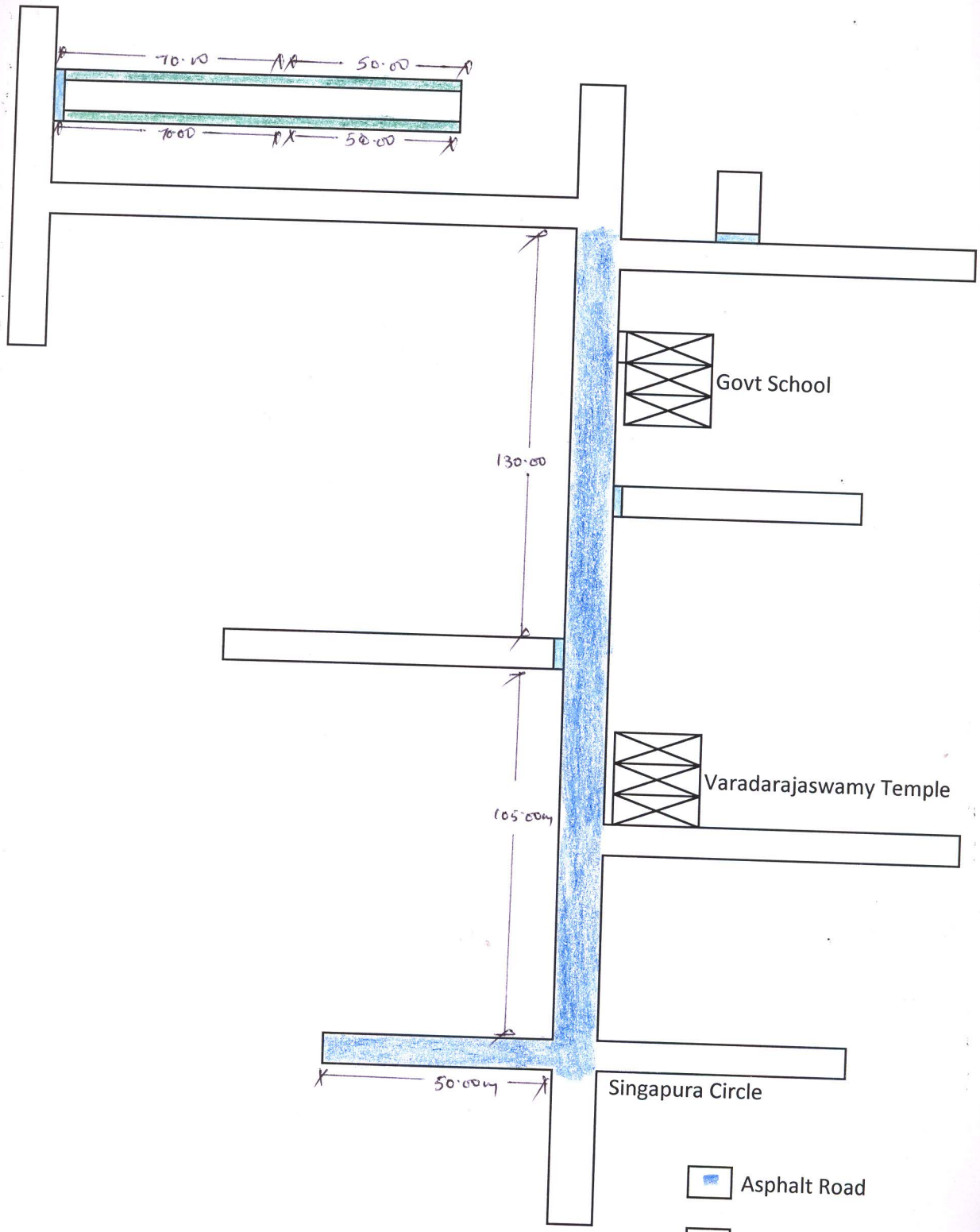
Joint Commissioner
(Yelahanka Zone)
BBMP, Bengaluru-92

Technical Sanction for Rs. 10.00 lakhs
Rs Ten lakhs
under P-1878 187. works
registered as EE No: 189 /12-13 Subject to conditions contained enclosed memo.
No: 189 /12-13 / Dr. 25-7-12

AE/JE

EE (BTP. Div.)

ketch for the Work of Improvements to Roads and drains in Hosabalunagara and Singapura Garden in Ward No. 11 (Kuvempunagara), Vidyarnyapura Sub Division.



Junior Engineer
Ward No. 11